

LCN Fund Full Submission

Supplementary Answer Form

Tick if this answer is Confidential: ☐

Tick if this answer has been provided verbally: ☐

Project code:	UKPN2002	Question Number	5
Question date	1 September 2011	Answer date	6 September 2011
Submission section question relates to			
Topic	Protection		
Question	In your assumptions of base case cost, it is noted that other protection methodologies can meet the function of directional overcurrent, but not used by UKPN. Why are these not being trialled?		
Notes on question			
Answer	<p>Where a suitable directional overcurrent (DOC) setting cannot be applied to ensure clearance of 132 kV faults (with earth faults usually being the worst case), in the event of intertrip failure, some practicable alternatives could be considered:</p> <ul style="list-style-type: none"> • Secure duplication of intertripping and a form of load imbalance protection. Duplication of intertripping relies upon significant investment in communications infrastructure (beyond what FPP is proposing) and this would significantly increase the cost of connection for generators. Therefore, this solution will not be trialled within the FPP project. • Intertripping schemes to all generators which would require interconnected pilot cables to generators. This has not been included in the FPP trials because it would significantly increase the cost of connection. <p>Therefore, the main reason for not trialling the above protection methodologies as part of the FPP project, is because their implementation would represent additional high costs to generator</p>		

	developers. The FPP project aims to trial protection methodologies (please see Use Case 2.1) that offer more cost-effective alternatives to the current DOC protection arrangements and the methodologies described above.
Attachments	
Verbal Clarifications (Consultants)	